

$\psi(3770)$

$$I^G(J^{PC}) = 0^-(1^{--})$$

NODE=M053

 $\psi(3770)$ MASS (MeV)

NODE=M053M

OUR FIT includes measurements of $m_{\psi(2S)}$, $m_{\psi(3770)}$, and $m_{\psi(3770)} - m_{\psi(2S)}$.

NODE=M053M

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
3773.15 ± 0.33 OUR FIT				
3778.1 ± 1.2 OUR AVERAGE				
3779.2	+1.8 +0.6 -1.7 -0.8	¹ ANASHIN	12A KEDR	$e^+e^- \rightarrow D\bar{D}$
3775.5	±2.4 ±0.5	57 AUBERT	08B BABR	$B \rightarrow D\bar{D}K$
3776	±5 ±4	68 BRODZICKA	08 BELL	$B^+ \rightarrow D^0\bar{D}^0K^+$
3778.8	±1.9 ±0.9	AUBERT	07BE BABR	$e^+e^- \rightarrow D\bar{D}\gamma$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
3772.0	±1.9	^{2,3} ABLIKIM	08D BES2	$e^+e^- \rightarrow \text{hadrons}$
3778.4	±3.0 ±1.3	34 CHISTOV	04 BELL	Sup. by BRODZICKA 08

NODE=M053M

¹ Taking into account interference between the resonant and non-resonant $D\bar{D}$ production.

NODE=M053M;LINKAGE=AN

² Reanalysis of data presented in BAI 02C. From a global fit over the center-of-mass energy region 3.7–5.0 GeV covering the $\psi(3770)$, $\psi(4040)$, $\psi(4160)$, and $\psi(4415)$ resonances. Phase angle fixed in the fit to $\delta = 0^\circ$.

NODE=M053M;LINKAGE=AB

³ Interference between the resonant and non-resonant $D\bar{D}$ production not taken into account.

NODE=M053M;LINKAGE=NI

 $m_{\psi(3770)} - m_{\psi(2S)}$

NODE=M053DM

OUR FIT includes measurements of $m_{\psi(2S)}$, $m_{\psi(3770)}$, and $m_{\psi(3770)} - m_{\psi(2S)}$.

NODE=M053DM

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
87.04 ± 0.33 OUR FIT			
86.6 ± 0.7 OUR AVERAGE Error includes scale factor of 2.0. See the ideogram below.			
86.9 ± 0.4	⁴ ABLIKIM	07E BES2	$e^+e^- \rightarrow \text{hadrons}$
86.7 ± 0.7	ABLIKIM	06L BES2	$e^+e^- \rightarrow \text{hadrons}$
80 ± 2	SCHINDLER	80 MRK2	e^+e^-
86 ± 2	⁵ BACINO	78 DLCO	e^+e^-
88 ± 3	RAPIDIS	77 LGW	e^+e^-

NODE=M053DM

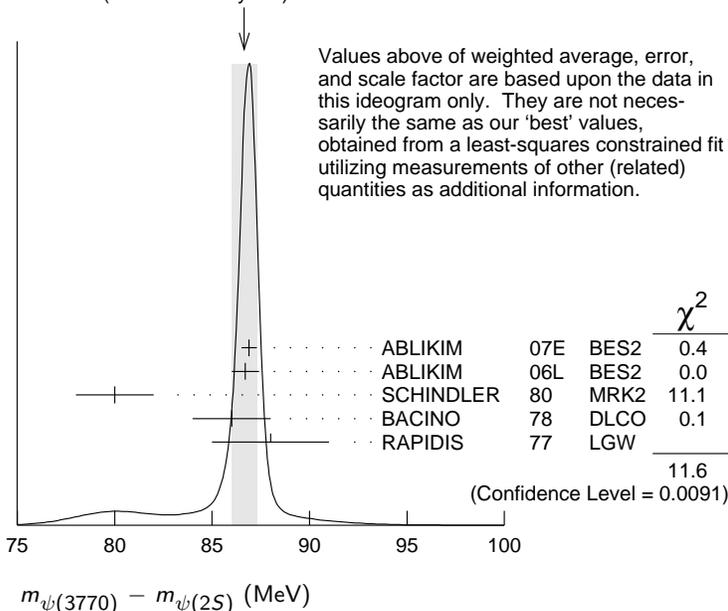
⁴ BES-II $\psi(2S)$ mass subtracted (see ABLIKIM 06L).

NODE=M053DM;LINKAGE=AK

⁵ SPEAR $\psi(2S)$ mass subtracted (see SCHINDLER 80).

NODE=M053DM;LINKAGE=S

WEIGHTED AVERAGE
86.6 ± 0.7 (Error scaled by 2.0)



$\psi(3770)$ WIDTH

NODE=M053W

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
27.2\pm 1.0 OUR FIT				
27.5\pm 0.9 OUR AVERAGE				
24.9 $^{+4.6+0.5}_{-4.0-1.1}$		⁶ ANASHIN	12A KEDR	$e^+ e^- \rightarrow D\bar{D}$
30.4 \pm 8.5		^{7,8} ABLIKIM	08D BES2	$e^+ e^- \rightarrow \text{hadrons}$
27 \pm 10 \pm 5	68	BRODZICKA	08 BELL	$B^+ \rightarrow D^0 \bar{D}^0 K^+$
28.5 \pm 1.2 \pm 0.2		⁸ ABLIKIM	07E BES2	$e^+ e^- \rightarrow \text{hadrons}$
23.5 \pm 3.7 \pm 0.9		AUBERT	07BE BABR	$e^+ e^- \rightarrow D\bar{D}\gamma$
26.9 \pm 2.4 \pm 0.3		⁸ ABLIKIM	06L BES2	$e^+ e^- \rightarrow \text{hadrons}$
24 \pm 5		⁸ SCHINDLER	80 MRK2	$e^+ e^-$
24 \pm 5		⁸ BACINO	78 DLCO	$e^+ e^-$
28 \pm 5		⁸ RAPIDIS	77 LGW	$e^+ e^-$

NODE=M053W

⁶ Taking into account interference between the resonant and non-resonant $D\bar{D}$ production.

NODE=M053W;LINKAGE=AN

⁷ Reanalysis of data presented in BAI 02C. From a global fit over the center-of-mass energy region 3.7–5.0 GeV covering the $\psi(3770)$, $\psi(4040)$, $\psi(4160)$, and $\psi(4415)$ resonances. Phase angle fixed in the fit to $\delta = 0^\circ$.

NODE=M053W;LINKAGE=AB

⁸ Interference between the resonant and non-resonant $D\bar{D}$ production not taken into account.

NODE=M053W;LINKAGE=NI

 $\psi(3770)$ DECAY MODES

NODE=M053220;NODE=M053

In addition to the dominant decay mode to $D\bar{D}$, $\psi(3770)$ was found to decay into the final states containing the J/ψ (BAI 05, ADAM 06). ADAMS 06 and HUANG 06A searched for various decay modes with light hadrons and found a statistically significant signal for the decay to $\phi\eta$ only (ADAMS 06).

NODE=M053

Mode	Fraction (Γ_i/Γ)	Scale factor/ Confidence level
Γ_1 $D\bar{D}$	(93 $^{+8}_{-9}$) %	S=2.0
Γ_2 $D^0 \bar{D}^0$	(52 \pm 5) %	S=2.0
Γ_3 $D^+ D^-$	(41 \pm 4) %	S=2.0
Γ_4 $J/\psi \pi^+ \pi^-$	(1.93 \pm 0.28) $\times 10^{-3}$	
Γ_5 $J/\psi \pi^0 \pi^0$	(8.0 \pm 3.0) $\times 10^{-4}$	
Γ_6 $J/\psi \eta$	(9 \pm 4) $\times 10^{-4}$	
Γ_7 $J/\psi \pi^0$	< 2.8 $\times 10^{-4}$	CL=90%
Γ_8 $e^+ e^-$	(9.6 \pm 0.7) $\times 10^{-6}$	S=1.3

DESIG=2

DESIG=5

DESIG=6

DESIG=4

DESIG=46

DESIG=47

DESIG=48

DESIG=1

Decays to light hadrons

NODE=M053;CLUMP=H

Γ_9 $b_1(1235)\pi$	< 1.4 $\times 10^{-5}$	CL=90%
Γ_{10} $\phi\eta'$	< 7 $\times 10^{-4}$	CL=90%
Γ_{11} $\omega\eta'$	< 4 $\times 10^{-4}$	CL=90%
Γ_{12} $\rho^0\eta'$	< 6 $\times 10^{-4}$	CL=90%
Γ_{13} $\phi\eta$	(3.1 \pm 0.7) $\times 10^{-4}$	
Γ_{14} $\omega\eta$	< 1.4 $\times 10^{-5}$	CL=90%
Γ_{15} $\rho^0\eta$	< 5 $\times 10^{-4}$	CL=90%
Γ_{16} $\phi\pi^0$	< 3 $\times 10^{-5}$	CL=90%
Γ_{17} $\omega\pi^0$	< 6 $\times 10^{-4}$	CL=90%
Γ_{18} $\pi^+ \pi^- \pi^0$	< 5 $\times 10^{-6}$	CL=90%
Γ_{19} $\rho\pi$	< 5 $\times 10^{-6}$	CL=90%
Γ_{20} $K^*(892)^+ K^- + \text{c.c.}$	< 1.4 $\times 10^{-5}$	CL=90%
Γ_{21} $K^*(892)^0 \bar{K}^0 + \text{c.c.}$	< 1.2 $\times 10^{-3}$	CL=90%
Γ_{22} $K_S^0 K_L^0$	< 1.2 $\times 10^{-5}$	CL=90%
Γ_{23} $2(\pi^+ \pi^-)$	< 1.12 $\times 10^{-3}$	CL=90%
Γ_{24} $2(\pi^+ \pi^-)\pi^0$	< 1.06 $\times 10^{-3}$	CL=90%
Γ_{25} $2(\pi^+ \pi^- \pi^0)$	< 5.85 %	CL=90%
Γ_{26} $\omega\pi^+ \pi^-$	< 6.0 $\times 10^{-4}$	CL=90%
Γ_{27} $3(\pi^+ \pi^-)$	< 9.1 $\times 10^{-3}$	
Γ_{28} $3(\pi^+ \pi^-)\pi^0$	< 1.37 %	
Γ_{29} $3(\pi^+ \pi^-)2\pi^0$	< 11.74 %	CL=90%
Γ_{30} $\eta\pi^+ \pi^-$	< 1.24 $\times 10^{-3}$	CL=90%
Γ_{31} $\pi^+ \pi^- 2\pi^0$	< 8.9 $\times 10^{-3}$	CL=90%

DESIG=20

DESIG=17

DESIG=16

DESIG=15

DESIG=8

DESIG=14

DESIG=13

DESIG=12

DESIG=11

DESIG=9

DESIG=10

DESIG=19

DESIG=18

DESIG=3

DESIG=21

DESIG=22

DESIG=208

DESIG=24

DESIG=52

DESIG=55

DESIG=210

DESIG=23

DESIG=206

Г32	$\rho^0 \pi^+ \pi^-$	< 6.9	$\times 10^{-3}$	CL=90%	DESIG=64
Г33	$\eta 3\pi$	< 1.34	$\times 10^{-3}$	CL=90%	DESIG=25
Г34	$\eta 2(\pi^+ \pi^-)$	< 2.43	%		DESIG=53
Г35	$\eta \rho^0 \pi^+ \pi^-$	< 1.45	%	CL=90%	DESIG=221
Г36	$\eta' 3\pi$	< 2.44	$\times 10^{-3}$	CL=90%	DESIG=26
Г37	$K^+ K^- \pi^+ \pi^-$	< 9.0	$\times 10^{-4}$	CL=90%	DESIG=27
Г38	$\phi \pi^+ \pi^-$	< 4.1	$\times 10^{-4}$	CL=90%	DESIG=28
Г39	$K^+ K^- 2\pi^0$	< 4.2	$\times 10^{-3}$	CL=90%	DESIG=207
Г40	$4(\pi^+ \pi^-)$	< 1.67	%	CL=90%	DESIG=62
Г41	$4(\pi^+ \pi^-) \pi^0$	< 3.06	%	CL=90%	DESIG=63
Г42	$\phi f_0(980)$	< 4.5	$\times 10^{-4}$	CL=90%	DESIG=29
Г43	$K^+ K^- \pi^+ \pi^- \pi^0$	< 2.36	$\times 10^{-3}$	CL=90%	DESIG=30
Г44	$K^+ K^- \rho^0 \pi^0$	< 8	$\times 10^{-4}$	CL=90%	DESIG=67
Г45	$K^+ K^- \rho^+ \pi^-$	< 1.46	%	CL=90%	DESIG=68
Г46	$\omega K^+ K^-$	< 3.4	$\times 10^{-4}$	CL=90%	DESIG=32
Г47	$\phi \pi^+ \pi^- \pi^0$	< 3.8	$\times 10^{-3}$	CL=90%	DESIG=69
Г48	$K^{*0} K^- \pi^+ \pi^0 + c.c.$	< 1.62	%	CL=90%	DESIG=70
Г49	$K^{*+} K^- \pi^+ \pi^- + c.c.$	< 3.23	%	CL=90%	DESIG=71
Г50	$K^+ K^- \pi^+ \pi^- 2\pi^0$	< 2.67	%	CL=90%	DESIG=209
Г51	$K^+ K^- 2(\pi^+ \pi^-)$	< 1.03	%	CL=90%	DESIG=57
Г52	$K^+ K^- 2(\pi^+ \pi^-) \pi^0$	< 3.60	%	CL=90%	DESIG=58
Г53	$\eta K^+ K^-$	< 4.1	$\times 10^{-4}$	CL=90%	DESIG=31
Г54	$\eta K^+ K^- \pi^+ \pi^-$	< 1.24	%	CL=90%	DESIG=222
Г55	$\rho^0 K^+ K^-$	< 5.0	$\times 10^{-3}$	CL=90%	DESIG=65
Г56	$2(K^+ K^-)$	< 6.0	$\times 10^{-4}$	CL=90%	DESIG=33
Г57	$\phi K^+ K^-$	< 7.5	$\times 10^{-4}$	CL=90%	DESIG=34
Г58	$2(K^+ K^-) \pi^0$	< 2.9	$\times 10^{-4}$	CL=90%	DESIG=35
Г59	$2(K^+ K^-) \pi^+ \pi^-$	< 3.2	$\times 10^{-3}$	CL=90%	DESIG=59
Г60	$K_S^0 K^- \pi^+$	< 3.2	$\times 10^{-3}$	CL=90%	DESIG=200
Г61	$K_S^0 K^- \pi^+ \pi^0$	< 1.33	%	CL=90%	DESIG=201
Г62	$K_S^0 K^- \rho^+$	< 6.6	$\times 10^{-3}$	CL=90%	DESIG=214
Г63	$K_S^0 K^- 2\pi^+ \pi^-$	< 8.7	$\times 10^{-3}$	CL=90%	DESIG=202
Г64	$K_S^0 K^- \pi^+ \rho^0$	< 1.6	%	CL=90%	DESIG=215
Г65	$K_S^0 K^- \pi^+ \eta$	< 1.3	%	CL=90%	DESIG=216
Г66	$K_S^0 K^- 2\pi^+ \pi^- \pi^0$	< 4.18	%	CL=90%	DESIG=203
Г67	$K_S^0 K^- 2\pi^+ \pi^- \eta$	< 4.8	%	CL=90%	DESIG=217
Г68	$K_S^0 K^- \pi^+ 2(\pi^+ \pi^-)$	< 1.22	%	CL=90%	DESIG=204
Г69	$K_S^0 K^- \pi^+ 2\pi^0$	< 2.65	%	CL=90%	DESIG=205
Г70	$K_S^0 K^- K^+ K^- \pi^+$	< 4.9	$\times 10^{-3}$	CL=90%	DESIG=218
Г71	$K_S^0 K^- K^+ K^- \pi^+ \pi^0$	< 3.0	%	CL=90%	DESIG=219
Г72	$K_S^0 K^- K^+ K^- \pi^+ \eta$	< 2.2	%	CL=90%	DESIG=220
Г73	$K^{*0} K^- \pi^+ + c.c.$	< 9.7	$\times 10^{-3}$	CL=90%	DESIG=60
Г74	$\rho \bar{\rho} \pi^0$	< 1.2	$\times 10^{-3}$		DESIG=54
Г75	$\rho \bar{\rho} \pi^+ \pi^-$	< 5.8	$\times 10^{-4}$	CL=90%	DESIG=36
Г76	$\Lambda \bar{\Lambda}$	< 1.2	$\times 10^{-4}$	CL=90%	DESIG=42
Г77	$\rho \bar{\rho} \pi^+ \pi^- \pi^0$	< 1.85	$\times 10^{-3}$	CL=90%	DESIG=37
Г78	$\omega \rho \bar{\rho}$	< 2.9	$\times 10^{-4}$	CL=90%	DESIG=39
Г79	$\Lambda \bar{\Lambda} \pi^0$	< 1.2	$\times 10^{-3}$	CL=90%	DESIG=72
Г80	$\rho \bar{\rho} 2(\pi^+ \pi^-)$	< 2.6	$\times 10^{-3}$	CL=90%	DESIG=61
Г81	$\eta \rho \bar{\rho}$	< 5.4	$\times 10^{-4}$	CL=90%	DESIG=38
Г82	$\eta \rho \bar{\rho} \pi^+ \pi^-$	< 3.3	$\times 10^{-3}$	CL=90%	DESIG=223
Г83	$\rho^0 \rho \bar{\rho}$	< 1.7	$\times 10^{-3}$	CL=90%	DESIG=66
Г84	$\rho \bar{\rho} K^+ K^-$	< 3.2	$\times 10^{-4}$	CL=90%	DESIG=40
Г85	$\eta \rho \bar{\rho} K^+ K^-$	< 6.9	$\times 10^{-3}$	CL=90%	DESIG=224
Г86	$\pi^0 \rho \bar{\rho} K^+ K^-$	< 1.2	$\times 10^{-3}$	CL=90%	DESIG=225
Г87	$\phi \rho \bar{\rho}$	< 1.3	$\times 10^{-4}$	CL=90%	DESIG=41
Г88	$\Lambda \bar{\Lambda} \pi^+ \pi^-$	< 2.5	$\times 10^{-4}$	CL=90%	DESIG=43
Г89	$\Lambda \bar{\rho} K^+$	< 2.8	$\times 10^{-4}$	CL=90%	DESIG=44
Г90	$\Lambda \bar{\rho} K^+ \pi^+ \pi^-$	< 6.3	$\times 10^{-4}$	CL=90%	DESIG=45

Radiative decays

Γ_{91}	$\gamma\chi_{c2}$	< 9	$\times 10^{-4}$	CL=90%
Γ_{92}	$\gamma\chi_{c1}$	(2.9 ± 0.6)	$\times 10^{-3}$	
Γ_{93}	$\gamma\chi_{c0}$	(7.3 ± 0.9)	$\times 10^{-3}$	
Γ_{94}	$\gamma\eta'$	< 1.8	$\times 10^{-4}$	CL=90%
Γ_{95}	$\gamma\eta$	< 1.5	$\times 10^{-4}$	CL=90%
Γ_{96}	$\gamma\pi^0$	< 2	$\times 10^{-4}$	CL=90%

NODE=M053;CLUMP=R

DESIG=51

DESIG=50

DESIG=49

DESIG=213

DESIG=212

DESIG=211

CONSTRAINED FIT INFORMATION

An overall fit to the total width, a partial width, and 3 branching ratios uses 23 measurements and one constraint to determine 5 parameters. The overall fit has a $\chi^2 = 20.0$ for 19 degrees of freedom.

The following *off-diagonal* array elements are the correlation coefficients $\langle \delta p_i \delta p_j \rangle / (\delta p_i \delta p_j)$, in percent, from the fit to parameters p_i , including the branching fractions, $x_i \equiv \Gamma_i / \Gamma_{\text{total}}$. The fit constrains the x_i whose labels appear in this array to sum to one.

x_3	98		
x_8	0	0	
Γ	0	0	-44
	x_2	x_3	x_8

	Mode	Rate (MeV)	Scale factor
Γ_2	$D^0 \bar{D}^0$	14.1 ± 1.4	1.7
Γ_3	$D^+ D^-$	11.2 ± 1.1	1.7
Γ_8	$e^+ e^-$	$(2.62 \pm 0.18) \times 10^{-4}$	1.4

DESIG=5

DESIG=6

DESIG=1

 $\psi(3770)$ PARTIAL WIDTHS

NODE=M053225

 $\Gamma(e^+ e^-)$ **Γ_8**

VALUE (keV)	EVTS	DOCUMENT ID	TECN	COMMENT
-------------	------	-------------	------	---------

NODE=M053W1

NODE=M053W1

0.262 ± 0.018 OUR FIT Error includes scale factor of 1.4.**0.256 ± 0.016 OUR AVERAGE** Error includes scale factor of 1.2.

$0.154^{+0.079+0.021}_{-0.058-0.027}$	9,10	ANASHIN	12A	KEDR	$e^+ e^- \rightarrow D \bar{D}$
0.22 ± 0.05	11,12	ABLIKIM	08D	BES2	$e^+ e^- \rightarrow \text{hadrons}$
$0.277 \pm 0.011 \pm 0.013$	12	ABLIKIM	07E	BES2	$e^+ e^- \rightarrow \text{hadrons}$
$0.203 \pm 0.003^{+0.041}_{-0.027}$	1.4M 12,13	BESSION	06	CLEO	$e^+ e^- \rightarrow \text{hadrons}$
0.276 ± 0.050	12	SCHINDLER	80	MRK2	$e^+ e^-$
0.18 ± 0.06	12	BACINO	78	DLCO	$e^+ e^-$

● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●

$0.414^{+0.072+0.093}_{-0.080-0.028}$	10,14	ANASHIN	12A	KEDR	$e^+ e^- \rightarrow D \bar{D}$
0.37 ± 0.09	15	RAPIDIS	77	LGW	$e^+ e^-$

OCCUR=2

⁹ Solution I of the two solutions.

NODE=M053W1;LINKAGE=A1

¹⁰ Taking into account interference between the resonant and non-resonant $D \bar{D}$ production.

NODE=M053W1;LINKAGE=AN

¹¹ Reanalysis of data presented in BAI 02C. From a global fit over the center-of-mass energy region 3.7–5.0 GeV covering the $\psi(3770)$, $\psi(4040)$, $\psi(4160)$, and $\psi(4415)$ resonances. Phase angle fixed in the fit to $\delta = 0^\circ$.

NODE=M053W1;LINKAGE=AB

¹² Interference between the resonant and non-resonant $D \bar{D}$ production not taken into account.

NODE=M053W1;LINKAGE=NI

¹³ BESSION 06 (as corrected in BESSION 10) measure $\sigma(e^+ e^- \rightarrow \psi(3770) \rightarrow \text{hadrons}) = 6.36 \pm 0.08^{+0.41}_{-0.30}$ nb at $\sqrt{s} = 3773 \pm 1$ MeV, and obtain $\Gamma_{e^+ e^-}$ from the Born-level cross section calculated using $\psi(3770)$ mass and width from our 2004 edition, PDG 04.

NODE=M053W1;LINKAGE=BE

¹⁴ Solution II of the two solutions.

NODE=M053W1;LINKAGE=A2

¹⁵ See also $\Gamma(e^+ e^-) / \Gamma_{\text{total}}$ below.

NODE=M053W1;LINKAGE=R

$\psi(3770)$ BRANCHING RATIOS

NODE=M053230

 $\Gamma(D\bar{D})/\Gamma_{\text{total}}$ $\Gamma_1/\Gamma = (\Gamma_2 + \Gamma_3)/\Gamma$

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
-------	------	-------------	------	---------

NODE=M053R1
NODE=M053R1**0.93^{+0.08}_{-0.09} OUR FIT** Error includes scale factor of 2.0.**0.93^{+0.08}_{-0.09} OUR AVERAGE** Error includes scale factor of 2.1.0.849 ± 0.056 ± 0.018 16 ABLIKIM 08B BES2 e⁺e⁻ → non-D \bar{D} 1.033 ± 0.014^{+0.048}_{-0.066} 1.427M 17 BESSON 06 CLEO e⁺e⁻ → hadrons

• • • We do not use the following data for averages, fits, limits, etc. • • •

0.866 ± 0.050 ± 0.036 18,19 ABLIKIM 07K BES2 e⁺e⁻ → non-D \bar{D} 0.836 ± 0.073 ± 0.042 19 ABLIKIM 06L BES2 e⁺e⁻ → D \bar{D} 0.855 ± 0.017 ± 0.058 19,20 ABLIKIM 06N BES2 e⁺e⁻ → D \bar{D} $\Gamma(D^0\bar{D}^0)/\Gamma_{\text{total}}$ Γ_2/Γ

VALUE	DOCUMENT ID	TECN	COMMENT
-------	-------------	------	---------

NODE=M053R46
NODE=M053R46**0.52 ± 0.05 OUR FIT** Error includes scale factor of 2.0.

• • • We do not use the following data for averages, fits, limits, etc. • • •

0.467 ± 0.047 ± 0.023 ABLIKIM 06L BES2 e⁺e⁻ → D⁰ \bar{D}^0 0.499 ± 0.013 ± 0.038 20 ABLIKIM 06N BES2 e⁺e⁻ → D⁰ \bar{D}^0 $\Gamma(D^+D^-)/\Gamma_{\text{total}}$ Γ_3/Γ

VALUE	DOCUMENT ID	TECN	COMMENT
-------	-------------	------	---------

NODE=M053R47
NODE=M053R47**0.41 ± 0.04 OUR FIT** Error includes scale factor of 2.0.

• • • We do not use the following data for averages, fits, limits, etc. • • •

0.369 ± 0.037 ± 0.028 ABLIKIM 06L BES2 e⁺e⁻ → D⁺D⁻0.357 ± 0.011 ± 0.034 20 ABLIKIM 06N BES2 e⁺e⁻ → D⁺D⁻ $\Gamma(D^0\bar{D}^0)/\Gamma(D^+D^-)$ Γ_2/Γ_3

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
-------	------	-------------	------	---------

NODE=M053R5
NODE=M053R5**1.260 ± 0.021 OUR FIT****1.260 ± 0.021 OUR AVERAGE**1.39 ± 0.31 ± 0.12 PAKHLOVA 08 BELL 10.6 e⁺e⁻ → D \bar{D} γ 1.78 ± 0.33 ± 0.24 AUBERT 07BE BABR e⁺e⁻ → D \bar{D} γ 1.258 ± 0.016 ± 0.014 DOBBS 07 CLEO e⁺e⁻ → D \bar{D} 1.27 ± 0.12 ± 0.08 ABLIKIM 06L BES2 e⁺e⁻ → D \bar{D} 2.43 ± 1.50 ± 0.43 34 21 CHISTOV 04 BELL B⁺ → $\psi(3770)K^+$ $\Gamma(J/\psi\pi^+\pi^-)/\Gamma_{\text{total}}$ Γ_4/Γ

VALUE (units 10 ⁻³)	EVTS	DOCUMENT ID	TECN	COMMENT
---------------------------------	------	-------------	------	---------

NODE=M053R4
NODE=M053R4**1.93 ± 0.28 OUR AVERAGE**1.89 ± 0.20 ± 0.20 231 ± 33 ADAM 06 CLEO e⁺e⁻ → $\psi(3770)$ 3.4 ± 1.4 ± 0.9 17.8 ± 4.8 BAI 05 BES2 e⁺e⁻ → $\psi(3770)$ $\Gamma(J/\psi\pi^0\pi^0)/\Gamma_{\text{total}}$ Γ_5/Γ

VALUE (units 10 ⁻²)	EVTS	DOCUMENT ID	TECN	COMMENT
---------------------------------	------	-------------	------	---------

NODE=M053R7
NODE=M053R7**0.080 ± 0.025 ± 0.016** 39 ± 14 ADAM 06 CLEO e⁺e⁻ → $\psi(3770)$ $\Gamma(J/\psi\eta)/\Gamma_{\text{total}}$ Γ_6/Γ

VALUE (units 10 ⁻⁵)	EVTS	DOCUMENT ID	TECN	COMMENT
---------------------------------	------	-------------	------	---------

NODE=M053R8
NODE=M053R8**87 ± 33 ± 22** 22 ± 10 ADAM 06 CLEO e⁺e⁻ → $\psi(3770)$ $\Gamma(J/\psi\pi^0)/\Gamma_{\text{total}}$ Γ_7/Γ

VALUE (units 10 ⁻⁵)	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
---------------------------------	-----	------	-------------	------	---------

NODE=M053R9
NODE=M053R9<28 90 <10 ADAM 06 CLEO e⁺e⁻ → $\psi(3770)$ $\Gamma(e^+e^-)/\Gamma_{\text{total}}$ Γ_8/Γ

VALUE (units 10 ⁻⁵)	DOCUMENT ID	TECN	COMMENT
---------------------------------	-------------	------	---------

NODE=M053R2
NODE=M053R2**0.96 ± 0.07 OUR FIT** Error includes scale factor of 1.3.**1.3 ± 0.2** RAPIDIS 77 LGW e⁺e⁻

¹⁶ Neglecting interference.

¹⁷ Obtained by comparing a measurement of the total cross section (corrected in BESSON 10) with that of $D\bar{D}$ reported by CLEO in DOBBS 07.

¹⁸ Using $\sigma^{obs} = 7.07 \pm 0.58$ nb and neglecting interference.

¹⁹ Not independent of ABLIKIM 08B.

²⁰ From a measurement of $\sigma(e^+e^- \rightarrow D\bar{D})$ at $\sqrt{s} = 3773$ MeV, using the $\psi(3770)$ resonance parameters measured by ABLIKIM 06L.

²¹ See ADLER 88C for older measurements of this quantity.

NODE=M053R1;LINKAGE=AI

NODE=M053R1;LINKAGE=BE

NODE=M053R1;LINKAGE=AL

NODE=M053R1;LINKAGE=SU

NODE=M053R;LINKAGE=AB

NODE=M053R5;LINKAGE=CH

NODE=M053250

NODE=M053R82
NODE=M053R82

NODE=M053R83
NODE=M053R83

NODE=M053R84
NODE=M053R84

NODE=M053R85
NODE=M053R85

NODE=M053R6
NODE=M053R6

NODE=M053R86
NODE=M053R86

NODE=M053R87
NODE=M053R87

NODE=M053R11
NODE=M053R11

NODE=M053R88
NODE=M053R88

NODE=M053R89
NODE=M053R89

NODE=M053R90
NODE=M053R90

NODE=M053R91
NODE=M053R91

————— DECAYS TO LIGHT HADRONS —————

$\Gamma(b_1(1235)\pi)/\Gamma_{total}$					Γ_9/Γ
VALUE (units 10^{-5})	CL%	DOCUMENT ID	TECN	COMMENT	
<1.4	90	22 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

$\Gamma(\phi\eta')/\Gamma_{total}$					Γ_{10}/Γ
VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT	
<7	90	22 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

$\Gamma(\omega\eta')/\Gamma_{total}$					Γ_{11}/Γ
VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT	
<4	90	22 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

$\Gamma(\rho^0\eta')/\Gamma_{total}$					Γ_{12}/Γ
VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT	
<6	90	22 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

$\Gamma(\phi\eta)/\Gamma_{total}$					Γ_{13}/Γ
VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT	
3.1±0.6±0.3		22 ADAMS	06	CLEO	3.773 $e^+e^- \rightarrow \phi\eta$

• • • We do not use the following data for averages, fits, limits, etc. • • •

<19		23 ABLIKIM	07B	BES2	$e^+e^- \rightarrow \psi(3770)$
-----	--	------------	-----	------	---------------------------------

$\Gamma(\omega\eta)/\Gamma_{total}$					Γ_{14}/Γ
VALUE (units 10^{-5})	CL%	DOCUMENT ID	TECN	COMMENT	
<1.4	90	22 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

$\Gamma(\rho^0\eta)/\Gamma_{total}$					Γ_{15}/Γ
VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT	
<5	90	22 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

$\Gamma(\phi\pi^0)/\Gamma_{total}$					Γ_{16}/Γ
VALUE (units 10^{-5})	CL%	DOCUMENT ID	TECN	COMMENT	
< 3	90	22 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

• • • We do not use the following data for averages, fits, limits, etc. • • •

<50		23 ABLIKIM	07B	BES2	$e^+e^- \rightarrow \psi(3770)$
-----	--	------------	-----	------	---------------------------------

$\Gamma(\omega\pi^0)/\Gamma_{total}$					Γ_{17}/Γ
VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT	
<6	90	22 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

$\Gamma(\pi^+\pi^-\pi^0)/\Gamma_{total}$					Γ_{18}/Γ
VALUE (units 10^{-6})	CL%	DOCUMENT ID	TECN	COMMENT	
<5	90	22,24 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

$\Gamma(\rho\pi)/\Gamma_{total}$					Γ_{19}/Γ
VALUE (units 10^{-6})	CL%	DOCUMENT ID	TECN	COMMENT	
<5	90	22,24 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

$\Gamma(K^*(892)^+K^- + c.c.)/\Gamma_{total}$					Γ_{20}/Γ
VALUE (units 10^{-5})	CL%	DOCUMENT ID	TECN	COMMENT	
<1.4	90	22 ADAMS	06	CLEO	$e^+e^- \rightarrow \psi(3770)$

$\Gamma(K^*(892)^0 \bar{K}^0 + c.c.)/\Gamma_{total}$ Γ_{21}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID	TECN	COMMENT
<1.2	90	22 ADAMS	06 CLEO	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R92
 NODE=M053R92

 $\Gamma(K_S^0 K_L^0)/\Gamma_{total}$ Γ_{22}/Γ

VALUE (units 10^{-5})	CL%	DOCUMENT ID	TECN	COMMENT
< 1.2	90	25 CRONIN-HEN..06	CLEO	$e^+ e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<21	90	26 ABLIKIM	04F BES	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R3
 NODE=M053R3

 $\Gamma(2(\pi^+ \pi^-))/\Gamma_{total}$ Γ_{23}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
<11.2	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<48		23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R21
 NODE=M053R21

 $\Gamma(2(\pi^+ \pi^-) \pi^0)/\Gamma_{total}$ Γ_{24}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
<10.6	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<62		23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R22
 NODE=M053R22

 $\Gamma(2(\pi^+ \pi^- \pi^0))/\Gamma_{total}$ Γ_{25}/Γ

VALUE (units 10^{-3})	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
<58.5	90	305	ABLIKIM	08N BES2	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R72
 NODE=M053R72

 $\Gamma(\omega \pi^+ \pi^-)/\Gamma_{total}$ Γ_{26}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
< 6.0	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<55	90	23 ABLIKIM	07I BES2	$3.77 e^+ e^-$

NODE=M053R24
 NODE=M053R24

 $\Gamma(3(\pi^+ \pi^-))/\Gamma_{total}$ Γ_{27}/Γ

VALUE (units 10^{-4})	DOCUMENT ID	TECN	COMMENT
<91	23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R07
 NODE=M053R07

 $\Gamma(3(\pi^+ \pi^-) \pi^0)/\Gamma_{total}$ Γ_{28}/Γ

VALUE (units 10^{-4})	DOCUMENT ID	TECN	COMMENT
<137	23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R10
 NODE=M053R10

 $\Gamma(3(\pi^+ \pi^-) 2\pi^0)/\Gamma_{total}$ Γ_{29}/Γ

VALUE (units 10^{-3})	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
<117.4	90	59	ABLIKIM	08N BES2	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R74
 NODE=M053R74

 $\Gamma(\eta \pi^+ \pi^-)/\Gamma_{total}$ Γ_{30}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID	TECN	COMMENT
<1.24	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<2.3	90	23 ABLIKIM	10D BES2	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R23
 NODE=M053R23

 $\Gamma(\pi^+ \pi^- 2\pi^0)/\Gamma_{total}$ Γ_{31}/Γ

VALUE (units 10^{-3})	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
<8.9	90	218	ABLIKIM	08N BES2	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R70
 NODE=M053R70

 $\Gamma(\rho^0 \pi^+ \pi^-)/\Gamma_{total}$ Γ_{32}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID	TECN	COMMENT
<6.9	90	23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R53
 NODE=M053R53

 $\Gamma(\eta 3\pi)/\Gamma_{total}$ Γ_{33}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
<13.4	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$

NODE=M053R25
 NODE=M053R25

$\Gamma(\eta 2(\pi^+ \pi^-))/\Gamma_{\text{total}}$					Γ_{34}/Γ	
<u>VALUE (units 10^{-4})</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R08 NODE=M053R08
<243		23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$		
$\Gamma(\eta \rho^0 \pi^+ \pi^-)/\Gamma_{\text{total}}$					Γ_{35}/Γ	
<u>VALUE (units 10^{-2})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R77 NODE=M053R77
<1.45	90	23 ABLIKIM	10D BES2	$e^+ e^- \rightarrow \psi(3770)$		
$\Gamma(\eta' 3\pi)/\Gamma_{\text{total}}$					Γ_{36}/Γ	
<u>VALUE (units 10^{-4})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R26 NODE=M053R26
<24.4	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$		
$\Gamma(K^+ K^- \pi^+ \pi^-)/\Gamma_{\text{total}}$					Γ_{37}/Γ	
<u>VALUE (units 10^{-4})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R27 NODE=M053R27
< 9.0	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<48		23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$		
$\Gamma(\phi \pi^+ \pi^-)/\Gamma_{\text{total}}$					Γ_{38}/Γ	
<u>VALUE (units 10^{-4})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R28 NODE=M053R28
< 4.1	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<16		23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$		
$\Gamma(K^+ K^- 2\pi^0)/\Gamma_{\text{total}}$					Γ_{39}/Γ	
<u>VALUE (units 10^{-3})</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	NODE=M053R71 NODE=M053R71
<4.2	90	14	ABLIKIM	08N BES2	$e^+ e^- \rightarrow \psi(3770)$	
$\Gamma(4(\pi^+ \pi^-))/\Gamma_{\text{total}}$					Γ_{40}/Γ	
<u>VALUE (units 10^{-3})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R50 NODE=M053R50
<16.7	90	23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$		
$\Gamma(4(\pi^+ \pi^-) \pi^0)/\Gamma_{\text{total}}$					Γ_{41}/Γ	
<u>VALUE (units 10^{-3})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R52 NODE=M053R52
<30.6	90	23 ABLIKIM	07F BES2	$e^+ e^- \rightarrow \psi(3770)$		
$\Gamma(\phi f_0(980))/\Gamma_{\text{total}}$					Γ_{42}/Γ	
<u>VALUE (units 10^{-4})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R29 NODE=M053R29
<4.5	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$		
$\Gamma(K^+ K^- \pi^+ \pi^- \pi^0)/\Gamma_{\text{total}}$					Γ_{43}/Γ	
<u>VALUE (units 10^{-4})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R30 NODE=M053R30
< 23.6	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<111		23 ABLIKIM	07B BES2	$e^+ e^- \rightarrow \psi(3770)$		
$\Gamma(K^+ K^- \rho^0 \pi^0)/\Gamma_{\text{total}}$					Γ_{44}/Γ	
<u>VALUE (units 10^{-4})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R58 NODE=M053R58
<8	90	23 ABLIKIM	07I BES2	$3.77 e^+ e^-$		
$\Gamma(K^+ K^- \rho^+ \pi^-)/\Gamma_{\text{total}}$					Γ_{45}/Γ	
<u>VALUE (units 10^{-4})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R59 NODE=M053R59
<146	90	23 ABLIKIM	07I BES2	$3.77 e^+ e^-$		
$\Gamma(\omega K^+ K^-)/\Gamma_{\text{total}}$					Γ_{46}/Γ	
<u>VALUE (units 10^{-4})</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		NODE=M053R32 NODE=M053R32
< 3.4	90	27 HUANG	06A CLEO	$e^+ e^- \rightarrow \psi(3770)$		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<66	90	23 ABLIKIM	07I BES2	$3.77 e^+ e^-$		

$\Gamma(\phi\pi^+\pi^-\pi^0)/\Gamma_{\text{total}}$					Γ_{47}/Γ	NODE=M053R60 NODE=M053R60
<u>VALUE (units 10⁻⁴)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
<38	90	23 ABLIKIM	07I BES2	3.77 e ⁺ e ⁻		
$\Gamma(K^{*0}K^-\pi^+\pi^0 + \text{c.c.})/\Gamma_{\text{total}}$					Γ_{48}/Γ	NODE=M053R61 NODE=M053R61
<u>VALUE (units 10⁻⁴)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
<162	90	23 ABLIKIM	07I BES2	3.77 e ⁺ e ⁻		
$\Gamma(K^{*+}K^-\pi^+\pi^- + \text{c.c.})/\Gamma_{\text{total}}$					Γ_{49}/Γ	NODE=M053R62 NODE=M053R62
<u>VALUE (units 10⁻⁴)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
<323	90	23 ABLIKIM	07I BES2	3.77 e ⁺ e ⁻		
$\Gamma(K^+K^-\pi^+\pi^-2\pi^0)/\Gamma_{\text{total}}$					Γ_{50}/Γ	NODE=M053R73 NODE=M053R73
<u>VALUE (units 10⁻³)</u>	<u>CL%</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
<26.7	90	24	ABLIKIM 08N	BES2	e ⁺ e ⁻ → $\psi(3770)$	
$\Gamma(K^+K^-2(\pi^+\pi^-))/\Gamma_{\text{total}}$					Γ_{51}/Γ	NODE=M053R57 NODE=M053R57
<u>VALUE (units 10⁻³)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
<10.3	90	23 ABLIKIM	07F BES2	e ⁺ e ⁻ → $\psi(3770)$		
$\Gamma(K^+K^-2(\pi^+\pi^-)\pi^0)/\Gamma_{\text{total}}$					Γ_{52}/Γ	NODE=M053R51 NODE=M053R51
<u>VALUE (units 10⁻³)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
<36.0	90	23 ABLIKIM	07F BES2	e ⁺ e ⁻ → $\psi(3770)$		
$\Gamma(\eta K^+K^-)/\Gamma_{\text{total}}$					Γ_{53}/Γ	NODE=M053R31 NODE=M053R31
<u>VALUE (units 10⁻⁴)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
< 4.1	90	27 HUANG	06A CLEO	e ⁺ e ⁻ → $\psi(3770)$		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<31	90	23 ABLIKIM	10D BES2	e ⁺ e ⁻ → $\psi(3770)$		
$\Gamma(\eta K^+K^-\pi^+\pi^-)/\Gamma_{\text{total}}$					Γ_{54}/Γ	NODE=M053R78 NODE=M053R78
<u>VALUE (units 10⁻²)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
<1.24	90	23 ABLIKIM	10D BES2	e ⁺ e ⁻ → $\psi(3770)$		
$\Gamma(\rho^0 K^+K^-)/\Gamma_{\text{total}}$					Γ_{55}/Γ	NODE=M053R54 NODE=M053R54
<u>VALUE (units 10⁻³)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
<5.0	90	23 ABLIKIM	07F BES2	e ⁺ e ⁻ → $\psi(3770)$		
$\Gamma(2(K^+K^-))/\Gamma_{\text{total}}$					Γ_{56}/Γ	NODE=M053R33 NODE=M053R33
<u>VALUE (units 10⁻⁴)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
< 6.0	90	27 HUANG	06A CLEO	e ⁺ e ⁻ → $\psi(3770)$		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<17		23 ABLIKIM	07B BES2	e ⁺ e ⁻ → $\psi(3770)$		
$\Gamma(\phi K^+K^-)/\Gamma_{\text{total}}$					Γ_{57}/Γ	NODE=M053R34 NODE=M053R34
<u>VALUE (units 10⁻⁴)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
< 7.5	90	27 HUANG	06A CLEO	e ⁺ e ⁻ → $\psi(3770)$		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<24		23 ABLIKIM	07B BES2	e ⁺ e ⁻ → $\psi(3770)$		
$\Gamma(2(K^+K^-)\pi^0)/\Gamma_{\text{total}}$					Γ_{58}/Γ	NODE=M053R35 NODE=M053R35
<u>VALUE (units 10⁻⁴)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
< 2.9	90	27 HUANG	06A CLEO	e ⁺ e ⁻ → $\psi(3770)$		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<46		23 ABLIKIM	07B BES2	e ⁺ e ⁻ → $\psi(3770)$		
$\Gamma(2(K^+K^-)\pi^+\pi^-)/\Gamma_{\text{total}}$					Γ_{59}/Γ	NODE=M053R48 NODE=M053R48
<u>VALUE (units 10⁻³)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>		
<3.2	90	23 ABLIKIM	07F BES2	e ⁺ e ⁻ → $\psi(3770)$		

$\Gamma(K_S^0 K^- \pi^+)/\Gamma_{\text{total}}$	Γ_{60}/Γ	
<u>VALUE (units 10⁻³)</u> <u>CL%</u> <u>EVTS</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R64 NODE=M053R64
<3.2 90 18	ABLIKIM 08M BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- \pi^+ \pi^0)/\Gamma_{\text{total}}$	Γ_{61}/Γ	
<u>VALUE (units 10⁻³)</u> <u>CL%</u> <u>EVTS</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R65 NODE=M053R65
<13.3 90 40	ABLIKIM 08M BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- \rho^+)/\Gamma_{\text{total}}$	Γ_{62}/Γ	
<u>VALUE (units 10⁻³)</u> <u>CL%</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R15 NODE=M053R15
<6.6 90	ABLIKIM 09C BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- 2\pi^+ \pi^-)/\Gamma_{\text{total}}$	Γ_{63}/Γ	
<u>VALUE (units 10⁻³)</u> <u>CL%</u> <u>EVTS</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R66 NODE=M053R66
<8.7 90 39	ABLIKIM 08M BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- \pi^+ \rho^0)/\Gamma_{\text{total}}$	Γ_{64}/Γ	
<u>VALUE (units 10⁻²)</u> <u>CL%</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R16 NODE=M053R16
<1.6 90	ABLIKIM 09C BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- \pi^+ \eta)/\Gamma_{\text{total}}$	Γ_{65}/Γ	
<u>VALUE (units 10⁻²)</u> <u>CL%</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R17 NODE=M053R17
<1.3 90	ABLIKIM 09C BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- 2\pi^+ \pi^- \pi^0)/\Gamma_{\text{total}}$	Γ_{66}/Γ	
<u>VALUE (units 10⁻³)</u> <u>CL%</u> <u>EVTS</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R67 NODE=M053R67
<41.8 90 23	ABLIKIM 08M BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- 2\pi^+ \pi^- \eta)/\Gamma_{\text{total}}$	Γ_{67}/Γ	
<u>VALUE (units 10⁻²)</u> <u>CL%</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R18 NODE=M053R18
<4.8 90	ABLIKIM 09C BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- \pi^+ 2(\pi^+ \pi^-))/\Gamma_{\text{total}}$	Γ_{68}/Γ	
<u>VALUE (units 10⁻³)</u> <u>CL%</u> <u>EVTS</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R68 NODE=M053R68
<12.2 90 4	ABLIKIM 08M BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- \pi^+ 2\pi^0)/\Gamma_{\text{total}}$	Γ_{69}/Γ	
<u>VALUE (units 10⁻³)</u> <u>CL%</u> <u>EVTS</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R69 NODE=M053R69
<26.5 90 17	ABLIKIM 08M BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- K^+ K^- \pi^+)/\Gamma_{\text{total}}$	Γ_{70}/Γ	
<u>VALUE (units 10⁻³)</u> <u>CL%</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R19 NODE=M053R19
<4.9 90	ABLIKIM 09C BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- K^+ K^- \pi^+ \pi^0)/\Gamma_{\text{total}}$	Γ_{71}/Γ	
<u>VALUE (units 10⁻²)</u> <u>CL%</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R75 NODE=M053R75
<3.0 90	ABLIKIM 09C BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K_S^0 K^- K^+ K^- \pi^+ \eta)/\Gamma_{\text{total}}$	Γ_{72}/Γ	
<u>VALUE (units 10⁻²)</u> <u>CL%</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R76 NODE=M053R76
<2.2 90	ABLIKIM 09C BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(K^{*0} K^- \pi^+ + \text{c.c.})/\Gamma_{\text{total}}$	Γ_{73}/Γ	
<u>VALUE (units 10⁻³)</u> <u>CL%</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R55 NODE=M053R55
<9.7 90	²³ ABLIKIM 07F BES2 e ⁺ e ⁻ → ψ(3770)	
$\Gamma(\rho \bar{\rho} \pi^0)/\Gamma_{\text{total}}$	Γ_{74}/Γ	
<u>VALUE (units 10⁻⁴)</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>	NODE=M053R09 NODE=M053R09
<12	²³ ABLIKIM 07B BES2 e ⁺ e ⁻ → ψ(3770)	

$\Gamma(\rho\bar{\rho}\pi^+\pi^-)/\Gamma_{\text{total}}$ Γ_{75}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
< 5.8	90	27 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<16		23 ABLIKIM	07B BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R36
NODE=M053R36 $\Gamma(\Lambda\bar{\Lambda})/\Gamma_{\text{total}}$ Γ_{76}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
<1.2	90	27 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<4	90	23 ABLIKIM	07F BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R42
NODE=M053R42 $\Gamma(\rho\bar{\rho}\pi^+\pi^-\pi^0)/\Gamma_{\text{total}}$ Γ_{77}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
<18.5	90	27 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<73		23 ABLIKIM	07B BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R37
NODE=M053R37 $\Gamma(\omega\rho\bar{\rho})/\Gamma_{\text{total}}$ Γ_{78}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
< 2.9	90	27 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<30	90	28 ABLIKIM	07I BES2	$3.77 e^+e^-$

NODE=M053R39
NODE=M053R39 $\Gamma(\Lambda\bar{\Lambda}\pi^0)/\Gamma_{\text{total}}$ Γ_{79}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
<12	90	23 ABLIKIM	07I BES2	$3.77 e^+e^-$

NODE=M053R63
NODE=M053R63 $\Gamma(\rho\bar{\rho}2(\pi^+\pi^-))/\Gamma_{\text{total}}$ Γ_{80}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID	TECN	COMMENT
<2.6	90	23 ABLIKIM	07F BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R49
NODE=M053R49 $\Gamma(\eta\rho\bar{\rho})/\Gamma_{\text{total}}$ Γ_{81}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
< 5.4	90	27 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<11	90	23 ABLIKIM	10D BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R38
NODE=M053R38 $\Gamma(\eta\rho\bar{\rho}\pi^+\pi^-)/\Gamma_{\text{total}}$ Γ_{82}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID	TECN	COMMENT
<3.3	90	23 ABLIKIM	10D BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R79
NODE=M053R79 $\Gamma(\rho^0\rho\bar{\rho})/\Gamma_{\text{total}}$ Γ_{83}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID	TECN	COMMENT
<1.7	90	23 ABLIKIM	07F BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R56
NODE=M053R56 $\Gamma(\rho\bar{\rho}K^+K^-)/\Gamma_{\text{total}}$ Γ_{84}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
< 3.2	90	27 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<11		23 ABLIKIM	07B BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R40
NODE=M053R40 $\Gamma(\eta\rho\bar{\rho}K^+K^-)/\Gamma_{\text{total}}$ Γ_{85}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID	TECN	COMMENT
<6.9	90	23 ABLIKIM	10D BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R80
NODE=M053R80 $\Gamma(\pi^0\rho\bar{\rho}K^+K^-)/\Gamma_{\text{total}}$ Γ_{86}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID	TECN	COMMENT
<1.2	90	23 ABLIKIM	10D BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R81
NODE=M053R81

$\Gamma(\phi\rho\bar{\rho})/\Gamma_{\text{total}}$ Γ_{87}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
<1.3	90	27 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<9		23 ABLIKIM	07B BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R41
NODE=M053R41 $\Gamma(\Lambda\bar{\Lambda}\pi^+\pi^-)/\Gamma_{\text{total}}$ Γ_{88}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
< 2.5	90	27 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<39	90	23 ABLIKIM	07F BES2	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R43
NODE=M053R43 $\Gamma(\Lambda\bar{\rho}K^+)/\Gamma_{\text{total}}$ Γ_{89}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
<2.8	90	27 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R44
NODE=M053R44 $\Gamma(\Lambda\bar{\rho}K^+\pi^+\pi^-)/\Gamma_{\text{total}}$ Γ_{90}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
<6.3	90	27 HUANG	06A CLEO	$e^+e^- \rightarrow \psi(3770)$

NODE=M053R45
NODE=M053R45

- 22 Comparing cross sections at $\sqrt{s} = 3.773$ GeV and $\sqrt{s} = 3.671$ GeV, neglecting interference, and using $\sigma(\psi(3770) \rightarrow D\bar{D}) = 6.39 \pm 0.20$ nb.
- 23 Assuming that interference effects between resonance and continuum can be neglected and using $\sigma^{obs}(e^+e^- \rightarrow \psi(3770)) = 7.15 \pm 0.38$ nb.
- 24 Data suggest possible destructive interference with continuum.
- 25 Using $\sigma(e^+e^- \rightarrow \psi(3770) \rightarrow \text{hadrons}) = (6.38 \pm 0.08^{+0.41}_{-0.30})$ nb from BESSON 06 and $B(K_S^0 \rightarrow \pi^+\pi^-) = 0.6895 \pm 0.0014$.
- 26 Using $B(K_S^0 \rightarrow \pi^+\pi^-) = 0.6860 \pm 0.0027$.
- 27 Using $\sigma_{tot}(e^+e^- \rightarrow \psi(3770)) = 7.9 \pm 0.6$ nb at the resonance.
- 28 Using $\sigma^{obs} = 7.15 \pm 0.27 \pm 0.27$ nb and neglecting interference.

NODE=M053R6;LINKAGE=AD

NODE=M053R10;LINKAGE=AK

NODE=M053R89;LINKAGE=AD

NODE=M053R3;LINKAGE=CR

NODE=M053R3;LINKAGE=AB

NODE=M053R;LINKAGE=HU

NODE=M053R24;LINKAGE=AB

NODE=M053240

RADIATIVE DECAYS

 $\Gamma(\gamma\chi_{c2})/\Gamma_{\text{total}}$ Γ_{91}/Γ

VALUE (units 10^{-3})	CL%	DOCUMENT ID	TECN	COMMENT
<0.9	90	29 COAN	06A CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<2.0	90	30 BRIERE	06 CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}$

NODE=M053R03
NODE=M053R03 $\Gamma(\gamma\chi_{c1})/\Gamma_{\text{total}}$ Γ_{92}/Γ

VALUE (units 10^{-3})	EVTS	DOCUMENT ID	TECN	COMMENT
$2.9 \pm 0.5 \pm 0.4$		31 BRIERE	06 CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}, \gamma\gamma J/\psi$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$3.9 \pm 1.4 \pm 0.6$	54 ± 17	32 BRIERE	06 CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}$
$2.8 \pm 0.5 \pm 0.4$	53 ± 10	29 COAN	06A CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$

NODE=M053R02
NODE=M053R02

OCCUR=2

 $\Gamma(\gamma\chi_{c1})/\Gamma(J/\psi\pi^+\pi^-)$ Γ_{92}/Γ_4

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
$1.49 \pm 0.31 \pm 0.26$	53 ± 10	33 COAN	06A CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$

NODE=M053R04
NODE=M053R04 $\Gamma(\gamma\chi_{c0})/\Gamma_{\text{total}}$ Γ_{93}/Γ

VALUE (units 10^{-3})	CL%	EVTS	DOCUMENT ID	TECN	COMMENT
$7.3 \pm 0.7 \pm 0.6$		274 ± 27	34 BRIERE	06 CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma + \text{hadrons}$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
< 44	90		29 COAN	06A CLEO	$e^+e^- \rightarrow \psi(3770) \rightarrow \gamma\gamma J/\psi$

NODE=M053R01
NODE=M053R01

$\Gamma(\gamma\chi_{c0})/\Gamma(\gamma\chi_{c2})$ Γ_{93}/Γ_{91}

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
-------	-----	-------------	------	---------

NODE=M053R06
 NODE=M053R06

••• We do not use the following data for averages, fits, limits, etc. •••

>8	90	35 BRIERE	06	CLEO $e^+e^- \rightarrow \psi(3770)$
----	----	-----------	----	--------------------------------------

 $\Gamma(\gamma\chi_{c0})/\Gamma(\gamma\chi_{c1})$ Γ_{93}/Γ_{92}

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
-------	-----	-------------	------	---------

NODE=M053R05
 NODE=M053R05

••• We do not use the following data for averages, fits, limits, etc. •••

2.5 ± 0.6		35 BRIERE	06	CLEO $e^+e^- \rightarrow \psi(3770)$
---------------	--	-----------	----	--------------------------------------

 $\Gamma(\gamma\eta')/\Gamma_{total}$ Γ_{94}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
--------------------------	-----	-------------	------	---------

NODE=M053R14
 NODE=M053R14

<1.8	90	36 PEDLAR	09	CLE3 $\psi(2S) \rightarrow \gamma X$
--------	----	-----------	----	--------------------------------------

 $\Gamma(\gamma\eta)/\Gamma_{total}$ Γ_{95}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
--------------------------	-----	-------------	------	---------

NODE=M053R13
 NODE=M053R13

<1.5	90	36 PEDLAR	09	CLE3 $\psi(2S) \rightarrow \gamma X$
--------	----	-----------	----	--------------------------------------

 $\Gamma(\gamma\pi^0)/\Gamma_{total}$ Γ_{96}/Γ

VALUE (units 10^{-4})	CL%	DOCUMENT ID	TECN	COMMENT
--------------------------	-----	-------------	------	---------

NODE=M053R12
 NODE=M053R12

<2	90	PEDLAR	09	CLE3 $\psi(2S) \rightarrow \gamma X$
------	----	--------	----	--------------------------------------

²⁹ Using $\Gamma_{ee}(\psi(2S)) = (2.54 \pm 0.03 \pm 0.11)$ keV from ADAM 06 and taking $\sigma(e^+e^- \rightarrow D\bar{D})$ from HE 05 for $\sigma(e^+e^- \rightarrow \psi(3770))$.

NODE=M053R0;LINKAGE=CO

³⁰ Uses $B(\psi(2S) \rightarrow \gamma\chi_{c2}) = 9.22 \pm 0.11 \pm 0.46\%$ from ATHAR 04, $\psi(2S)$ mass and width from PDG 04, and $\Gamma_{ee}(\psi(2S)) = 2.54 \pm 0.03 \pm 0.11$ keV from ADAM 06.

NODE=M053R03;LINKAGE=BR

³¹ Averages the two measurements from COAN 06A and BRIERE 06.

NODE=M053R02;LINKAGE=BI

³² Uses $B(\psi(2S) \rightarrow \gamma\chi_{c1}) = 9.07 \pm 0.11 \pm 0.54\%$ from ATHAR 04, $\psi(2S)$ mass and width from PDG 04, and $\Gamma_{ee}(\psi(2S)) = 2.54 \pm 0.03 \pm 0.11$ keV from ADAM 06.

NODE=M053R02;LINKAGE=BR

³³ Using $B(\psi(3770) \rightarrow J/\psi\pi^+\pi^-) = (1.89 \pm 0.20 \pm 0.20) \times 10^{-3}$ from ADAM 06.

NODE=M053R04;LINKAGE=CO

³⁴ Uses $B(\psi(2S) \rightarrow \gamma\chi_{c0}) = 9.33 \pm 0.14 \pm 0.61\%$ from ATHAR 04, $\psi(2S)$ mass and width from PDG 04, and $\Gamma_{ee}(\psi(2S)) = 2.54 \pm 0.03 \pm 0.11$ keV from ADAM 06.

NODE=M053R01;LINKAGE=BR

³⁵ Not independent of other results in BRIERE 06.

NODE=M053R05;LINKAGE=BR

³⁶ Assuming maximal destructive interference between $\psi(3770)$ and continuum sources.

NODE=M053R13;LINKAGE=PE

 $\psi(3770)$ REFERENCES

NODE=M053

ANASHIN	12A	PL B711 292	V.V. Anashin <i>et al.</i>	(KEDR Collab.)	REFID=54055
ABLIKIM	10D	EPJ C66 11	M. Ablikim <i>et al.</i>	(BES II Collab.)	REFID=53350
BESSON	10	PRL 104 159901E	D. Besson <i>et al.</i>	(CLEO Collab.)	REFID=53245
ABLIKIM	09C	EPJ C64 243	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=53134
PEDLAR	09	PR D79 111101	T.K. Pedlar <i>et al.</i>	(CLEO Collab.)	REFID=52998
ABLIKIM	08B	PL B659 74	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=52129
ABLIKIM	08D	PL B660 315	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=52142
ABLIKIM	08M	PL B670 179	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=52569
ABLIKIM	08N	PL B670 184	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=52570
AUBERT	08B	PR D77 011102	B. Aubert <i>et al.</i>	(BABAR Collab.)	REFID=52120
BRODZICKA	08	PRL 100 092001	J. Brodzicka <i>et al.</i>	(BELLE Collab.)	REFID=52144
PAKHLOVA	08	PR D77 011103	G. Pakhlova <i>et al.</i>	(BELLE Collab.)	REFID=52132
ABLIKIM	07B	PL B650 111	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=51704
ABLIKIM	07E	PL B652 238	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=51882
ABLIKIM	07F	PL B656 30	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=51940
ABLIKIM	07I	EPJ C52 805	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=52045
ABLIKIM	07K	PR D76 122002	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=52073
AUBERT	07BE	PR D76 111105	B. Aubert <i>et al.</i>	(BABAR Collab.)	REFID=52074
DOBBS	07	PR D76 112001	S. Dobbs <i>et al.</i>	(CLEO Collab.)	REFID=52075
ABLIKIM	06L	PRL 97 121801	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=51129
ABLIKIM	06N	PL B641 145	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=51131
ADAM	06	PRL 96 082004	N.E. Adam <i>et al.</i>	(CLEO Collab.)	REFID=50989
ADAMS	06	PR D73 012002	G.S. Adams <i>et al.</i>	(CLEO Collab.)	REFID=50990
BESSON	06	PRL 96 092002	D. Besson <i>et al.</i>	(CLEO Collab.)	REFID=51041
Also		PRL 104 159901E	D. Besson <i>et al.</i>	(CLEO Collab.)	REFID=53245
BRIERE	06	PR D74 031106	R.A. Briere <i>et al.</i>	(CLEO Collab.)	REFID=51149
COAN	06A	PRL 96 182002	T.E. Coan <i>et al.</i>	(CLEO Collab.)	REFID=51155
CRONIN-HENNESSY	06	PR D74 012005	D. Cronin-Hennessy <i>et al.</i>	(CLEO Collab.)	REFID=51156
HUANG	06A	PRL 96 032003	G.S. Huang <i>et al.</i>	(CLEO Collab.)	REFID=50999
BAI	05	PL B605 63	J.Z. Bai <i>et al.</i>	(BES Collab.)	REFID=50332
HE	05	PRL 95 121801	Q. He <i>et al.</i>	(CLEO Collab.)	REFID=50924
Also		PRL 96 199903 (err.)	Q. He <i>et al.</i>	(CLEO Collab.)	REFID=51211
ABLIKIM	04F	PR D70 077101	M. Ablikim <i>et al.</i>	(BES Collab.)	REFID=50185
ATHAR	04	PR D70 112002	S.B. Athar <i>et al.</i>	(CLEO Collab.)	REFID=50331
CHISTOV	04	PRL 93 051803	R. Chistov <i>et al.</i>	(BELLE Collab.)	REFID=50002
PDG	04	PL B592 1	S. Eidelman <i>et al.</i>	(PDG Collab.)	REFID=49653
BAI	02C	PRL 88 101802	J.Z. Bai <i>et al.</i>	(BES Collab.)	REFID=50506
ADLER	88C	PRL 60 89	J. Adler <i>et al.</i>	(Mark III Collab.)	REFID=40361
SCHINDLER	80	PR D21 2716	R.H. Schindler <i>et al.</i>	(Mark II Collab.)	REFID=22222
BACINO	78	PRL 40 671	W.J. Bacino <i>et al.</i>	(SLAC, UCLA, UCI)	REFID=11437
RAPIDIS	77	PRL 39 526	P.A. Rapidis <i>et al.</i>	(LGW Collab.)	REFID=22220